

CANADA

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FIL | LING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------|------------|------------|----------------------|---------------------|------------------|
| 09/739,902 | 12/20/2000 | | Valerie A. Simpson | 9-13528-137US 4944 | |
| 20988 | 7590 | 11/28/2006 | | EXAMINER | |
| OGILVY R | ENAULT | T LLP | COULTER, KENNETH R | | |
| 1981 MCGII | L COLLE | EGE AVENUE | | | |
| SUITE 1600 | | | | ART UNIT | PAPER NUMBER |
| MONTREAL OC H3A2Y3 | | | | 2141 | |

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | | |
|--|--|---|--|--|--|--|--|
| | 09/739,902 | SIMPSON ET AL. | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | Kenneth R. Coulter | 2141 | | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be timil apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | I. lely filed the mailing date of this communication. O (35 U.S.C. § 133). | | | | | |
| Status | | • | | | | | |
| 1) Responsive to communication(s) filed on 08 Se | eptember 2006. | | | | | | |
| · = · · · · · · · · · · · · · · · · · · | action is non-final. | | | | | | |
| , <u> </u> | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under E | | | | | | | |
| Disposition of Claims | | | | | | | |
| 4)⊠ Claim(s) <u>1-33</u> is/are pending in the application. | | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ Claim(s) <u>1-5,8-11,14-17,20,21,24-27,30 and 31</u> is/are rejected. | | | | | | | |
| · | | | | | | | |
| 8) Claim(s) are subject to restriction and/or | | | | | | | |
| Application Papers | | | | | | | |
| 9) The specification is objected to by the Examiner | | | | | | | |
| 10)⊠ The drawing(s) filed on <u>20 December 2000</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correcti | | · | | | | | |
| 11) The oath or declaration is objected to by the Exa | | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: | priority under 35 U.S.C. § 119(a) | -(d) or (f). | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| | | • | | | | | |
| 144 - a h - a - a - a - a - a - a - a - a - | | · | | | | | |
| Attachment(s) | 4) 🔲 الملمة المصادر والمساور و | (DTO 412) | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) | | | | | | |
| nformation Disclosure Statement(s) (PTO/SB/08) | 5) 🔲 Notice of Informal P | | | | | | |
| Paper No(s)/Mail Date 6) Other: | | | | | | | |

Art Unit: 2141

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1 5, 8 11, 14 17, 20, 21, 24 27, 30, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Sistanizadeh et al. (U.S. Pat. No. 6,963,575) (Enhanced Data Switching/Routing for Multi-Regional IP Over Fiber Network).
- 2.1 Regarding claim 1, Sistanizadeh discloses a method of protecting an Open Shortest Path First (OSPF) network against network failures affecting traffic flow between an interior router (IR) and a predetermined primary area border router (ABR) using a back-up link between the IR and a predetermined alternate ABR, the method comprising steps of:

maintaining the back-up link in a dormant state during normal operations of the network, such that no traffic is forwarded to the back-up link during normal

Art Unit: 2141

operations of the network (Fig. 5; col. 17, lines 40 – 54 "the standby agents in those switches **keep one link in a standby inactive state**, ..."; col. 23, lines 44 – 45 "M-POPs serve as Area Boarder Routers (ABRs)"; col. 15, lines 13 – 21 "**All paths that are not needed to reach the root switch** from anywhere in the switched network are placed in Spanning-Tree Protocol **backup mode**"; col. 15, lines 39 – 44); and

activating the back-up link in response to a network failure affecting communications between the IR and the primary ABR, such that traffic can be routed between the IR and the alternate ABR through the back-up link (Fig. 5; col. 17, lines 40 – 54; col. 23, lines 44 – 45; col. 15, lines 16 – 44 "if a link goes down, each switch on an end of the link knows and can update its STP routing information, i.e. making the failed link inactive and activating the redundant link that may have been previously blocked.").

2.2 Per claim 2, Sistanizadeh teaches a method as claimed in claim 1, wherein the step of maintaining the back-up link in a dormant state comprises steps of:

assigning a backup interface type attribute to the back-up link (col. 3, lines 27 – 51; col. 9, lines 19 - 36); and

controlling each of the IR and the alternate ABR such that:

information respecting the back-up link is not advertised to adjacent routers (col. 3, lines 27 – 51; col. 9, lines 19 - 36); and

Application/Control Number: 09/739,902 Page 4

Art Unit: 2141

the back-up link is not identified as a valid route in respective forwarding tables of each of the IR and the alternate ABR (col. 3, lines 27 – 51; col. 9, lines 19 - 36).

2.3 Regarding claim 3, Sistanizadeh discloses a method as claimed in claim 1, wherein the step of activating the back-up link comprises steps of:

detecting the network failure affecting communications between the IR and the primary ABR (col. 15, lines 16 - 44);

promoting the back-up link to an active status (col. 15, lines 16 - 44); and advertising the back-up link as a valid route (col. 3, lines 27 – 51; col. 9, lines 19 - 36).

- 2.4 Per claims 4 5 and 8 11, the rejection of claims 1 3 under 35 USC 102(e) (paragraphs 2.1 2.3 above) applies fully.
- 2.5 Regarding claims 14 17, 20, 21, 24 27, 30, and 31, the rejection of claims 1 5 and 8 11 under 35 USC 102(e) (paragraphs 2.1 2.4 above) applies fully.

Response to Arguments

3. Applicant's arguments filed 9/8/06 have been fully considered but they are not persuasive.

Art Unit: 2141

Applicant argues that "Sistanizadeh fail to teach the steps of maintaining a backup link in a dormant state between an interior router and a predetermined alternate area border router and activating the backup link in response to a network failure to route traffic between the IR and the alternate ABR over the backup link."

Examiner disagrees.

As seen in Figure 5 and col. 17, lines 40 – 54, a backup link is maintained in a dormant state between an interior router and a predetermined alternate area border router; activating the backup link in response to a network failure to route traffic between the IR and the alternate ABR over the backup link (Fig. 5; col. 17, lines 40 – 54 "the standby agents in those switches **keep one link in a standby inactive state**, ..."; col. 23, lines 44 – 45 "M-POPs serve as Area Boarder Routers (ABRs)").

Allowable Subject Matter

4. Claims 6, 7, 12, 13, 18, 19, 22, 23, 28, 29, 32, and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth R. Coulter whose telephone number is 571 272-3879. The examiner can normally be reached on M – F, 7 am – 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2141

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

krc